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| 1 | Poster session: Parallelizing the buckshot algorithm for efficient document clustering
Eric C. Jensen , Steven M. Beitzel , Angelo J. Pilotto , Nazli Goharian , Ophir Frieder
Proceedings of the eleventh international conference on Information and knowledge management November 2002
We present a parallel implementation of the Buckshot document clustering algorithm. We demonstrate that this parallel approach is highly efficient both in terms of load balancing and minimization of communication. In a series of experiments using the 2GB of SGML data from TREC disks 4 and 5, our parallel approach was shown to be scalable in terms of processors efficiently used and the number of clusters created. | 100% |
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Philip Brisk , Adam Kaplan , Ryan Kastner , Majid Sarrafzadeh
Proceedings of the international conference on Compilers, architecture, and synthesis for embedded systems October 2002
The increasing demand for complex and specialized embedded hardware must be met by processors which are optimized for performance, yet are also extremely flexible. In our work, we explore the tradeoff between flexibility and performance in the domain of reconfigurable processor design. Specifically, we seek to | 100% |


identify regularly occurring, computation-heavy patterns in an application or set of applications. These patterns become candidates for hard-logic implementation, potentially embedded in t ...


- 3** Function-based object model towards website adaptation 100%
Jinlin Chen , Baoyao Zhou , Jin Shi , Hongjiang Zhang , Qiu Fengwu
Proceedings of the tenth international conference on World Wide Web
April 2001
- 4** A parallel bottom-up clustering algorithm with applications to 100%
circuit partitioning in VLSI design
Jason Cong , M'Lissa Smith
Proceedings of the 30th international on Design automation conference
July 1993
- 5** PROP: a recursive paradigm for area-efficient and performance 99%
oriented partitioning of large FPGA netlists
Roman Kužnar , Franc Brglez
Proceedings of the 1995 IEEE/ACM international conference on
Computer-aided design December 1995
- 6** A fast and stable hybrid genetic algorithm for the ratio-cut 99%
partitioning problem on hypergraphs
Thang Nguyen Bui , Byung Ro Moon
Proceedings of the 31st annual conference on Design automation
conference June 1994
- 7** Multi-way netlist partitioning into heterogeneous FPGAs and 99%
minimization of total device cost and interconnect
Roman Kužnar , Franc Brglez , Baldomir Zajc
Proceedings of the 31st annual conference on Design automation
conference June 1994
- 8** Physical Design: Efficient circuit clustering for area and power 99%
reduction in FPGAs
Amit Singh , Malgorzata Marek-Sadowska
Tenth ACM International Symposium on Field-Programmable Gate
Arrays February 2002
We present a routability-driven bottom-up clustering technique for
area and power reduction in clustered FPGAs. This technique uses a
cell connectivity metric to identify seeds for efficient clustering.
Effective seed selection, coupled with an interconnect-resource
aware clustering and placement, can have a favorable impact on


circuit routability. It leads to better device utilization, savings in area, and reduction in power consumption. Routing area reduction of 35% is achieved over previously ...

- 9** Hierarchical clusterization, decomposition and multilevel 99%
 macromodeling—the effective and efficient tools to solve the sign and very high size combinatorial circuit type problems (abstract only)
 Roman Bazylevych
 Proceedings of the symposium on Contemporary computing in Ukraine
 February 2000

The paper gives a generalization of author and his scientific group recent works in combinatorial non-polynomial high and very high size problems that appear in physical design automation of electronic devices including VLSI and SoC. The optimal circuit reduction method is marked as the better tool to recognize the hierarchical cluster structure of the circuit. Its possibilities to solve the wide spectrum of various problems, including forced hierarchical partitioning with given constraints, ...

- 10** Realizing the performance potential of the virtual interface 99%
 architecture
 Evan Speight , Hazim Abdel-Shafi , John K. Bennett
 Proceedings of the 13th international conference on Supercomputing
 May 1999


- 11** Circuit clustering using graph coloring 99%
 Amit Singh , Malgorzata Marek-Sadowska
 Proceedings of the 1999 international symposium on Physical design
 April 1999

- 12** Concurrent automata, database computers, and security: a 99%
 "new" security paradigm for secure parallel processing
 T. Y. Lin
 Proceedings on the 1992-1993 workshop on New security paradigms
 August 1993

- 13** Multilevel circuit partitioning 99%
[4] Charles J. Alpert , Jen-Hsin Huang , Andrew B. Kahng
Proceedings of the 34th annual conference on Design automation conference June 1997
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[4] Dirk Behrens , Klaus Harbich , Erich Barke
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- 15** A unified cost model for min-cut partitioning with replication 99%
[4] applied to optimization of large heterogeneous FPGA partitions
Roman Kužnar , Baldomir Zajc , Franc Brglez
Proceedings of the conference on European design automation conference September 1994
- 16** A parallel algorithm for record clustering 98%
[4] Edward Omiecinski , Peter Scheuermann
ACM Transactions on Database Systems (TODS) December 1990
Volume 15 Issue 4
We present an efficient heuristic algorithm for record clustering that can run on a SIMD machine. We introduce the P-tree, and its associated numbering scheme, which in the split phase allows each processor independently to compute the unique cluster number of a record satisfying an arbitrary query. We show that by restricting ourselves in the merge phase to combining only sibling clusters, we obtain a parallel algorithm whose speedup ratio is optimal in the number of processors used. Final ...
- 17** Data placement in Bubba 98%
[4] George Copeland , William Alexander , Ellen Boughter , Tom Keller
Proceedings of the 1988 ACM SIGMOD international conference on Management of data June 1988
This paper examines the problem of data placement in Bubba, a highly-parallel system for data-intensive applications being developed at MCC. "Highly-parallel" implies that load balancing is a critical performance issue.
"Data-intensive" means data is so large that operations should be executed where the data resides. As a result, data placement becomes a critical performance issue. In general, determining the optimal placement of d ...
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[4] Gerhard Weikum , Peter Zabback , Peter Scheuermann

ACM SIGMOD Record , Proceedings of the 1991 ACM SIGMOD
international conference on Management of data April 1991
Volume 20 Issue 2

19 Fractals for secondary key retrieval 97%

 C. Faloutsos , S. Roseman

Proceedings of the eighth ACM SIGACT-SIGMOD-SIGART symposium
on Principles of database systems March 1989

In this paper we propose the use of fractals and especially the Hilbert curve, in order to design good distance-preserving mappings. Such mappings improve the performance of secondary-key- and spatial- access methods, where multi-dimensional points have to be stored on an 1-dimensional medium (e.g., disk). Good clustering reduces the number of disk accesses on retrieval, improving the response time. Our experiments on range queries and nearest neighbor queries showed that the proposed Hilbe ...



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George Forman , Bin Zhang

ACM SIGKDD Explorations Newsletter December 2000

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Ram Ramanathan , Martha Steenstrup
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A new technique for 2-dimensional layout compaction of integrated circuits is presented. After a traditional one-dimensional precompaction step, the size of the layout is further reduced with a technique that bears a strong similarity to the technique of 'zone-refining' used in the purification of crystal ingots. Individual circuit components or small clusters of components are peeled off row by row from the precompacted layout, moved across an open zone, and reassembled at the other end of ...
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Supporting reliable delivery of multicast datagrams, in IP networks, may necessitate the introduction of new elements and features. Further, considerable additional signaling may be required to support this service. Providing a platform that efficiently supports IP multicast

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